

Belen Apartments Affordable Housing Renovation, Belen, NM



The Belen Apartments is a 39-unit multi-family affordable housing development located in Belen, NM. The subsidized family project is undergoing a renovation to improve energy efficiency, water conservation, stormwater management and general landscaping. The project has qualified for the Enterprise Green Communities Criteria for Moderate Rehabilitations, thus meeting a housing industry standard for green renovations. Natural Systems International (NSI) worked with Autotroph architects and the client to provide the design of the new stormwater management plan that improves drainage, incorporates 'rain gardens' to support native plantings, and utilizes a constructed wetland to treat the site's stormwater runoff.



The goal of the renovation is to reduce utility costs and provide a healthier living environment. Improvements include replacing the roofing materials, installing Energy Star® appliances, adding insulated stucco, upgrading windows, exterior doors and skylights with efficient models, installing new evaporative coolers, and refinishing the interiors with low-VOC paints and flooring. To improve water efficiency, in addition to new low-flow plumbing fixtures, the units will be outfitted with gutters and downspouts that feed rain barrels and rain gardens.



NSI designed a series of rain gardens that snake throughout the common areas to convey and absorb runoff from the roof and surrounding landscaped areas. The areas surrounding and within the gardens are planted with xeric, diverse, and in some cases edible native plants. The rain gardens will be constructed using large riverstone already present on the site. The existing stormwater basin – an overgrown and trash-littered depression adjacent to the playground and proposed community center building – will be upgraded into a stormwater constructed wetland. The wetland area will be planted with native and adapted wetland species and be landscaped to provide a more aesthetic backdrop to the community areas.

images from top to bottom:
Existing Conditions
Rendering showing upgrades (Autotroph)
Existing, overgrown stormwater pond